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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,830	03/07/2002	Sumihiro Okawa	450100-03808	8003

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EXAMINER	
GEREZGIHER, YEMANE M	
ART UNIT	**PAPER NUMBER**
2144	
MAIL DATE	**DELIVERY MODE**
07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/092,830	OKAWA ET AL.	
	Examiner	Art Unit	
	Yemane M. Gerezgiher	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 March 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/07/2007 has been entered. Claims 1-10 remain pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al., (US 6,891,838) hereinafter referred to as Petite.

As per claim 1: Petite disclosed a router (a gateway routing control commands, abstract and Fig. Fig. 2, # 110a) comprising: routing means for routing an IP packet [Fig. 2, # 110a routing information between a home

appliances and controlling computer over the IP network]; an infrared-ray-emitting unit for emitting an infrared ray to an external apparatus; and control means for controlling said infrared-ray-emitting unit to emit an infrared ray based on a signal for controlling said external apparatus in accordance with data included in an IP packet received by said routing means [Column 7, Lines 39-65, Abstract, "computing device may forward command signals to the gateway device. In response thereto, the gateway may convert the command signals into appropriate command encoded signals for wireless transmission to a designated actuator integrated in a residential system]".

Petite substantially disclosed the invention as claimed. Petite further suggested that the control signals could be in different form of wireless communication signals including light signals (IR emitting signals). Petite's choice of communication signal is mainly RF based, thus failing to disclosed IR signals in communication and control of the remotely disposed appliances. However, given the suggestion in terms of the possible communication mediums, one of ordinary skill in the art would have realized that any choice of the wireless communication signal is viable based on plurality of factors. It is very well known that there is several wireless communication signals utilized in a wireless communication, including RF (Radio Frequency), IR (Infrared), Bluetooth, and IEEE WI-FI 801.11. X seriates. These are readily available signaling protocols, which are utilized in accordance with factors such as cost, design, coverage and other feasible benefits. Thus, it is respectfully submitted

that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take any of the readily available signaling mechanisms best applicable based on the several factors disclosed above, perhaps IR signaling protocol (say if the devices to be controlled are in a single location as there is a direct sight between the controlling device and the devices to be controlled) and have modified the teachings of Petite related to remotely controlling home appliances via a WAN by sending a packet data comprising a command received by the controlling gateway, the gateway converting the packet data (digital signal) into an IR signal in order to remotely control home appliances.

As per claim 2: Petite disclosed an apparatus exchanging an IP packet with said routing means is a computer [Fig. 8, # 110, a PC].

As per claim 3: Petite disclosed a control protocol adopted between said router and said computer is an RTSP (Real Time Streaming Protocol) [Abstract, and Column 2, Lines 10-46, broadcasting the control signal in real-time, which imply the use of a real-time transport protocol].

As per claim 4: Petite disclosed an input unit for inputting an analog signal output by said external apparatus; and conversion means for converting said input analog signal into a digital signal, which is disassembled into IP packets to be output to said computer [Column 7, Lines 39-65, Column 12,

Lines 6-9, Lines 61-65 and Column 14, Lines 1-8, signal conversion of analog into digital signal in accordance with an IP based communication protocol].

As per claim 6: Petite disclosed said infrared-ray-emitting unit can be mounted on and dismounted from a main body of said router [Fig. 3, the gateway having therein a transceiver emitting command signals also acknowledged other signal emitting transport mechanisms (see Column 2, Lines 30-31 and Column 7, Lines 29-33].

Claim 7 has limitations substantially the same as in claim 6 above. Thus, it is rejected with the same rationale.

As per claim 8: Petite disclosed an infrared-ray-emitting device for controlling an external apparatus; and an analog input port for receiving an analog signal from said external apparatus [Column 7, Lines 39-65, Abstract, "computing device may forward command signals to the gateway device. In response thereto, the gateway may convert the command signals into appropriate command encoded signals for wireless transmission to a designated actuator integrated in a residential system". Furthermore, Petite disclosed signal conversion of analog into digital signal in accordance with an IP based communication protocol; see Column 7, Lines 39-65, Column 12, Lines 6-9, Lines 61-65 and Column 14, Lines 1-8]. Petite substantially disclosed the invention as claimed. Petite further suggested that the control signals could be in different form of wireless communication signals including

light signals (IR emitting signals). Petite's choice of communication signal is mainly RF based, thus failing to disclosed IR signals in communication and control of the remotely disposed appliances. However, given the suggestion in terms of the possible communication mediums, one of ordinary skill in the art would have realized that any choice of the wireless communication signal is viable based on plurality of factors. It is very well known that there is several wireless communication signals utilized in a wireless communication, including RF (Radio Frequency), IR (Infrared), Bluetooth, and IEEE WI-FI 801.11. X series. These are wireless transmission protocols that were readily available signaling protocols at the time of the invention, which are utilized in accordance with different factors such as cost, design, coverage and other feasible benefits. Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take any of the readily available optional signaling mechanisms best applicable based on the several factors discussed above, perhaps IR signaling protocol (say if the devices to be controlled are in a single location as there is a direct sight between the controlling device and the devices to be controlled) and have modified the teachings of Petite related to remotely controlling home appliances via a WAN by sending a packet data comprising a command received by the controlling gateway, the gateway converting the packet data (digital signal) into an IR signal in order to remotely control home appliances.

4. Claims 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petite et al., (US 6,891,838) in view of Humpleman et al. (U.S. Patent Number 6,891,838) hereinafter referred to as Humpleman.

As per claim 10: Petite disclosed a method for controlling apparatus by using a router (gateway Fig. 2), comprising the steps of: emitting an infrared ray based on a signal for controlling said audio/video apparatus from said router to apparatus in accordance with a request made by a computer connected to said router [Fig. 2, # 110a routing information between a home appliances and controlling computer over the IP network, and Column 7, Lines 39-65, Abstract, "computing device may forward command signals to the gateway device. In response thereto, the gateway may convert the command signals into appropriate command encoded signals for wireless transmission to a designated actuator integrated in a residential system]; driving said router to convert an analog signal supplied by apparatus as a result of execution of an operation at said above step to said router into a digital signal; and outputting said digital signal obtained as a result of conversion from said router to said computer [Column 7, Lines 39-65, Column 12, Lines 6-9, Lines 61-65 and Column 14, Lines 1-8, signal conversion of analog into digital signal in accordance with an IP based communication protocol].

Petite substantially disclosed the invention as claimed. Petite further suggested that the control signals could be in different form of wireless

communication signals including light signals (IR emitting signals). Petite's choice of communication signal is mainly RF based, thus failing to disclosed IR signals in communication and control of the remotely disposed appliances. However, given the suggestion in terms of the possible communication mediums, one of ordinary skill in the art would have realized that any choice of the wireless communication signal is viable based on plurality of factors. It is very well known that there is several wireless communication signals utilized in a wireless communication, including RF (Radio Frequency), IR (Infrared), Bluetooth, and IEEE WI-FI 801.11. X series. These are transmission protocols that were readily available signaling protocols way before the time of the invention, which are utilized in accordance with factors such as cost, design, coverage and other feasible benefits. Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take any of the readily available signaling mechanisms best applicable based on the several factors disclosed above, perhaps IR signaling protocol (say if the devices to be controlled are in a single location as there is a direct sight between the controlling device and the devices to be controlled) and have modified the teachings of Petite related to remotely controlling home appliances via a WAN by sending a packet data comprising a command received by the controlling gateway, the gateway converting the packet data (digital signal) into an IR signal in order to remotely control home appliances.

Petite substantially disclosed the invention as recited. However, Petite was silent about the controlled devices being audio/video devices. However, in the same field of invention, Humpleman disclosed remotely controlling remote audio video devices (see Abstract, Fig. 1, and Figs. 7-8, Figs. 10-11, Column 1, Line 45 through Column 2, Line 60 and Column 14, Line 42 through Column 15, Line 15). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Humpleman related to remote monitoring and controlling of A/V device and have modified the teachings of Petite in order to facilitate controlling of home devices that are connected but remotely located through the user's home (see Humpleman, Column 2, Lines 20-22).

As per claim 9: The already combined teachings of Petite and Humpleman disclosed said analog input port comprises an audio-signal input sub-port for inputting an analog signal and a video-signal input sub-port for inputting a video signal [Petite, Column 7, Lines 39-65, Column 12, Lines 6-9, Lines 61-65 and Column 14, Lines 1-8, signal conversion of analog into digital signal in accordance with an IP based communication protocol and Humpleman see Abstract, Fig. 1, and Figs. 7-8, Figs. 10-11, Column 1, Line 45 through Column 2, Line 60 and Column 14, Line 42 through Column 15, Line 15]. Thus, this claim and claim 5 are rejected with the same rationale claim 10 is rejected above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Sawada (US 6735619 B1) entitled: "Home network gateway apparatus and home network device"

b. Gamble (US 7194072 B2) entitled: "Method and system for remotely accessing and controlling remote devices"

c. Moutaux et al. (US 6906635 B1) entitled: "Telecommunication system including device controller with downloadable interface and remote control, and method for controlling communication system"

d. Wang (US 20030001883 A1) entitled: "Architecture for home network on world wide web with private-public IP address/URL mapping"

e. Ficco et al. (US 6868292 B2) entitled: "Device control via digitally stored program content"

f. Humpleman et al. (US 6801507 B1) entitled: "Device discovery and configuration in a home network"

g. Saito et al. (US 6523696 B1) entitled: "Communication control device for realizing uniform service providing environment"

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose

telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Patent Examiner,
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